

## **REMARKS**

Applicant's representative (Matthew H. Szalach, Reg. No. 53,665) would like to thank Examiner Phan for the courtesies extended during a telephonic interview conducted on September 8, 2006. During the interview, the Examiner clarified the rejection of independent Claims 15 and 21, in light of Uchiyama (U.S. Patent No. 6,265,770). Specifically, the Examiner asserted that Uchiyama discloses a band region (A) that extends between output terminals (12) and, therefore, discloses the elements of independent Claims 15 and 21. Applicant's representative noted that Uchiyama failed to disclose a band region having a longitudinal axis that extends toward an output side terminal of a substrate.

The Examiner seemed receptive to these remarks, but directed Applicant to amend independent Claims 15 and 21 to recite the band region being formed having a longitudinal axis extending toward an output side terminal, rather than simply stating that the band region includes a longitudinal axis that extends toward an output side terminal as each of independent Claims 15 and 21 are method claims. Accordingly, Applicant has amended each of independent Claims 15 and 21 to recite forming a band region including a longitudinal axis extending toward an output side terminal, as suggested by the Examiner.

Claims 15, 16, 21-23, 25-26, 28-32, 36-38, 40, and 41 are now pending in the application. By this paper, Claims 15, 21, and 38 have been amended and Claims 40 and 41 have been added. The basis for these amendments and new claims can be found throughout the specification, claims, and drawings originally filed. No new matter has been added. The preceding amendments and the following remarks are believed to

be fully responsive to the outstanding Office Action and are believed to place the application in condition for allowance. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

**REJECTION UNDER 35 U.S.C. § 102**

Claims 15, 23 and 28-32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Uchiyama (U.S. Pat. No. 6,265,770).

This rejection is respectfully traversed.

Independent Claim 15 recites a method of manufacturing a circuit board having a substrate and output side terminal. The method includes solder mounting first components within a pair of first regions on the substrate, forming a band region between the pair of first regions including a second region, a third region having wiring patterns that join the first components together, and a longitudinal axis extending from the second region toward the output side terminal. After mounting the first components, an anisotropic conductive film is arranged within and extending along the longitudinal axis of the band region of the substrate. A second component is arranged on the anisotropic conductive film such that the anisotropic conductive film is disposed between the second component and the substrate and the second component is thermocompression-bonded within the second region on the substrate.

Uchiyama fails to disclose a band region disclosed on a substrate of a circuit board having a longitudinal axis that extends toward an output side terminal disclosed on the substrate. Rather, Uchiyama discloses a circuit substrate having electronic chip

parts for driving a liquid-crystal device, whereby an IC mounting area (A) extends generally between the electronic chip parts (2). See Uchiyama at Col. 5, Lines 21 through 47 and Figure 1. Uchiyama discloses input terminals (12) disposed on the substrate located adjacent to the IC mounting area (A). See Uchiyama at Col. 5, Lines 34 through 47 and Figure 1. The IC mounting area (A) includes a longitudinal axis that extends toward the electronic chip parts (2), but fails to extend *toward* the input terminals (12). See Uchiyama at Fig. 1. In fact, Applicant respectfully submits, that the longitudinal axis of the IC mounting area (A) actually extends away from the input terminals (12) (i.e. in a direction approximately 90° from the direction of the input terminals (12)). See Uchiyama at Fig. 1.

In light of the foregoing, Applicant respectfully submits that independent Claim 15, as well as Claims 23 and 28 through 32, dependent therefrom, earned condition for allowance. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

#### **REJECTION UNDER 35 U.S.C. § 103**

Claims 16, 25 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchiyama (U.S. Pat. No. 6,265,770).

Claims 21, 22, 37 and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchiyama in view of Uchiyama et al. (U.S. Pat. No. 5,847,796).

These rejections are respectfully traversed.

At the outset, Applicant respectfully submits that this rejection is moot with respect to Claims 16, 25, and 26, as each of Claims 16, 25, and 26 depend from

independent Claim 15, which is believed to be in condition for allowance in light of the foregoing remarks. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Independent Claim 21 recites a method of manufacturing a circuit board having an output side terminal disposed along an edge of the circuit board. The method includes arranging a band region including a longitudinal axis extending toward the output side terminal on a surface of the circuit board between a pair of first regions. A first component is soldered onto the circuit board in a first region located outside of the band region and a second component is thermocompression-bonded to the circuit board following soldering of the first component to the first region. The second component is thermocompression-bonded to the circuit board within the band region using an anisotropic conductive film and a compression bonding head where the band region is wider than the head.

As noted above, Uchiyama (U.S. Pat. No. 6,265,770) fails to disclose a band region having a longitudinal axis extending toward an output side terminal. Because Uchiyama (U.S. Pat. No. 5,847,796) fails to cure this deficiency on Uchiyama (U.S. Pat. No. 6,265,770), Applicant respectfully submits that independent Claim 21, as well as Claims 22, 37, and 38, dependent therefrom, are in condition for allowance. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

#### **NEW CLAIMS**

New Claims 40 and 41 are added for consideration. Because Claims 40 and 41 respectfully depend from independent Claims 15 and 21, which are believed to be in

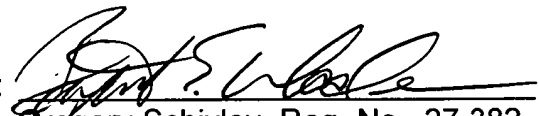
condition for allowance in light of the foregoing remarks, Applicant respectfully submits that Claims 40 and 41 are similarly in condition for allowance.

#### CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: Sept. 11, 2006

By:   
G. Gregory Schivley, Reg. No. 27,382  
Bryant E. Wade, Reg. No. 40,344

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

GGs/BEW/MHS/ca